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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,873

12/12/2003

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01/04/2006

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EXAMINER

DAVIS, OCTAVIA L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,873

Applicant(s)

GO BONCAN.ET AL.



Examiner

Octavia Davis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-15 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 8 – 15 in the reply filed on 10/31/05 is acknowledged. The traversal is on the grounds that a single inventive concept is included in the claims. This is found persuasive and the restriction requirement is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 7 and 16 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maki, Jr. in view of Lacy.

Regarding claims 1, 16, 17 and 19, Maki, Jr. discloses a method and apparatus for measuring a cement sample comprising inserting a cement specimen S into a cement mold 11 inside a pressure vessel 14 (See Col. 5, lines 34 – 38), increasing the temperature and pressure within the vessel (See Col. 5, lines 43 – 46), allowing the specimen S to cure and applying an axial stress and strain to the specimen (See Col. 7, lines 57 – 67) but does not disclose determining a ratio of axial stress and strain in the specimen wherein the ratio is the Young's modulus. However, Lacy discloses an apparatus and method for non-destructively measuring a sample of material to determine changes in Young's modulus comprising a sample of material 325 that is subjected to expansion or contraction,

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sensors 255, 310 positioned to transmit and receive ultrasonic signals through the sample and an electronic subsystem 120 – 130 that includes a CPU 130 that averages the multiple replications and uses these figures to calculate the Young's modulus (See Col. 3, lines 34 – 60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Maki, Jr. according to the teachings of Lacy for the purpose of, Providing a method to analyze cement including determining Young's modulus to indicate the time at which cement sets up, the degree of cement slurry thickening and the degree that the cement shrinks or expands under simulated down-hole conditions (See Lacy, Col. 2, lines 32 – 38).

Regarding claims 2, 7 and 18, a sensor 25 measures the deflection of the specimen S (See Col. 6, lines 6 – 11 and 21 – 24, Col. 8, lines 60 – 67 and Col. 9, lines 1 – 3).

Regarding claim 3, the pressure vessel 14 is at a greater pressure than atmospheric pressure (See Col. 8, lines 7 – 30).

Regarding claim 4, the pressure vessel is at a specific temperature (See Col. 5, lines 43 – 46).

Regarding claim 5, a data unit 147 accumulates data (See Col. 13, lines 44 – 62).

Regarding claims 6 and 29, pluralities of samples are placed in the pressure vessel 14 (See Col. 3, lines 7 – 15).

Allowable Subject Matter

4. Claims 8 - 15 are allowed.

Response to Arguments

5. Applicant's arguments, with respect to claims 1 – 7 and 16 – 19, filed 10/31/05 have been fully considered but they are not persuasive. In response to applicant's argument that the references

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do not teach “applying a measured axial stress and axial strain tension to the specimen”, it is the examiner’s position that in Maki, Jr. the holder 26 is an axially extending transducer holder that displaces the sample S in an axial direction by progressing axially from the surface of sample toward the bottom of the sample and by positioning the lower end of the sensor 25 in the sample when the cover 13 is closed, thus an axial pressure applied to the sample causes the sample to displace or stretch (See Col. 7, lines 57 – 67 , Col. 8, lines 50 – 59 and Col. 14, lines 20 - 26) and the sensor 25 measures and evaluates signals transmitted through the sample to determine various characteristics of the cement sample, and in Lacy, the sample 325 is subjected to an axial expansion (tensional force)by the applied pressure of a piston 210 and the change in length of the sample is measured (See Col. 3, lines 21 – 27 and Col. 4, lines 20 – 32), thus the references still stand.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant’s disclosure.

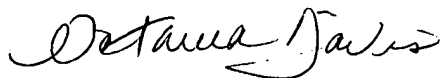
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Crockford (6,591,690) discloses a material testing machine with a dual test space and integral axisymmetric triaxial measurement system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Octavia Davis whose telephone number is 571-272-2176. The examiner can normally be reached on Mon to Thru from 9 to 5. The examiner can also be reached on alternate Fridays.

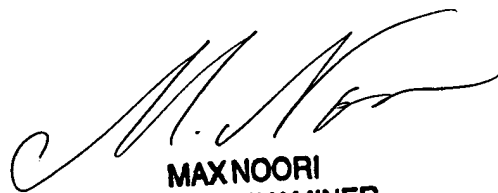
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



OD/2855

12/30/05



MAX NOORI
PRIMARY EXAMINER